CLAIMS

What Is Claimed Is:

1. A spa system including a remote control for controlling operation thereof, said system comprising:

a. a remote control module having a microprocessor and memory therefor and receptive to push-button inputs and having a display thereon, and having a first antenna for transmitting signals to said spa and for receiving signals from said spa;

b. a master control module residing in said spa for controlling and sensing a multiplicity of functions of said spa; and,

c. a slave control module coupled to said master control module and having a second antenna responsive to command signals received from said remote control and for transmitting status signals back to said remote control, said slave control module being disposed for converting said command signals received from said remote control for said master control, and for converting status signals received from said master control for transmission back to said remote control.

2. The system as in Claim 1 wherein a first of said command signals received from said remote control is set temperature.

3. The system as in Claim 1 wherein a first of said status signals received from said master control is water temperature.

4. The system as in Claim 1 wherein said remote control transmits command signals and receives status signals with the use of radio frequencies.

5. The system as in Claim 4 wherein said remote control includes an RF transceiver coupled between an output of said microprocessor and said first antenna.

6. The system as in Claim 1 wherein said remote control is responsive to a reduced number of push-buttons.

7. An RF remote control for controlling an apparatus having a master control module disposed for controlling and sensing a multiplicity of functions of said apparatus, said master control module having a first antenna for receiving command signals from said remote control and for transmitting status signals back to said remote control, said remote control comprising:

a. a processor;

b. memory coupled to said processor;

c. push-buttons coupled to inputs of said processor and disposed for providing input data for transmission to said apparatus;

d. a second antenna for transmitting command signals to said apparatus and for receiving status signals back from said apparatus; and,

e. a display for showing data indicative of said status signals received from said apparatus.

8. The remote control as in Claim 7 wherein said remote control includes a reduced number of push-buttons.

9. The remote control as in Claim 7 wherein said remote control includes an RF transceiver coupled between an output of said processor and said first antenna.

10. In a remote control for an apparatus having a master control module disposed for controlling and sensing a

multiplicity of functions of said apparatus, a method for transmitting command signals to said master control module from said remote control and for receiving status signals back from said master control module, said method comprising:

a. after initialization, turning on a back light in said remote control;

b. determining if a push-button on said remote control has been depressed, and if so;

c. resetting a timer and placing said remote control in transmit mode;

d. transmitting a data signal to said apparatus indicative of said depressed push-button;

e. resetting a timer and placing said remote control in receive mode; and,

f. receiving and displaying said status signal received from said master control.

11. The method as in Claim 10 wherein it is determined that a push button has not been depressed, further including the steps of:

a. determining if a 15 second timer has expired, and if so;

b. turning off the back light of said remote control.

12. The method as in Claim 10 wherein no push button has been depressed for over two minutes, further including the steps of:

a. placing said remote control in a sleep mode;

b. determining if a push button has been depressed, and if not;

c. putting said remote control off line.

13. The method as in Claim 10 further including the step of placing said remote control in a normal receive mode.

14. The method as in Claim 13 further including the steps of:

a. determining if data is requested, and if so;

b. sending request to said master control;

c. listening for a reply from said master control, and if valid data is received;

d. displaying said valid data.

15. The method as in Claim 14 further including the step of determining if more than two requests for data have been made, and if so, clearing said display of said remote control.

16. In a remote control for controlling a spa having a master control module disposed for controlling and sensing a multiplicity of functions of said spa, a method for transmitting command signals to said master control module from said remote control and for receiving status signals back from said master control module, said method comprising:

a. after initialization, turning on a back light in said remote control;

b. determining if a push-button on said remote control has been depressed, and if so;

c. resetting a timer and placing said remote control in transmit mode;

d. transmitting a data signal to said spa indicative of setting water temperature thereof;

e. resetting a timer and placing said remote control in receive mode; and,

f. receiving and displaying data representative of water temperature sensed in said spa by said master control.

17. A storage medium encoded with machine-readable computer program code for use in a remote control for controlling a spa having a master control module disposed for controlling sensing a multiplicity of functions of said spa, wherein, when the computer program code is executed by said remote control, the remote control performs a method for transmitting command signals to said master control module from said remote control and for receiving status signals back from said master control module, said method comprising:

a. after initialization, turning on a back light in said remote control;

b. determining if a push-button on said remote control has been depressed, and if so;

c. resetting a timer and placing said remote control in transmit mode;

d. transmitting a data signal to said spa indicative of setting water temperature thereof;

e. resetting a timer and placing said remote control in receive mode; and

f. receiving and displaying data representative of water temperature sensed in said spa by said master control.

18. The medium as in Claim 17 further including the step of placing said remote control in a normal receive mode.

19. The medium as in Claim 18 further including the steps of:

a. determining if data is requested, and if so;

b. sending request to said master control;

c. listening for a reply from said master control, and if valid data is received;

d. displaying said valid data.

20. The medium as in Claim 19 further including the step of determining if more than two requests for data have been made, and if so, clearing said display of said remote control.